

REMARKS/ARGUMENTS

Claims 1-25 are pending. Support for the amendment of Claims 1 and 8 to change "at least 1%" to --at least 10%-- is found on page 8, line 24, of the specification. Support for new dependent Claims 12-23 is found as follows. The fragrances of Claims 12-16 find support in the specification on pages 4-6. Claims 17-20 find support in the specification at page 8, line 33-page 9, line 25. Claim 21 finds support on page 9, lines 39-40. Claim 22 finds support at the top of page 10 of the specification and Claim 23 on page 10, lines 8 and 9.

Support for new method Claims 24 and 25 is found in the specification, for example, on page 7, lines 41-45, which describes base-hydrolyzable bonds and the pH range 8-14 and on page 9, lines 34-42, which describes acid-hydrolyzable bonds and the pH range 2-7. Accordingly, the Applicants do not believe that any new matter has been added.

The Applicants thank Examiner Mruk for the courteous and helpful discussion of August 29, 2003. It was suggested that the claims be revised to avoid the prior art compositions and that method claims be drafted. Accordingly, the Applicants have now revised Claims 1 and 8 to further distinguish them from the prior art, present new dependent Claims 12-23, which contain additional compositional limitations, and add new method Claims 24 and 25. Favorable consideration is respectfully requested.

Information Disclosure Statement

English equivalents of the documents cited on pages 1, 2 and 12 of the specification were submitted to the U.S. Patent Office in the information disclosure statement filed March 14, 2002.

Rejection—35 U.S.C. §112, second paragraph

Claim 7 was rejected under 35 U.S.C. 112, second paragraph as being indefinite.

This rejection is moot in view of the revision of this claim as a method claim.

Rejection—35 U.S.C. §102

Claims 1-11 were rejected under 35 U.S.C. 102(b) as being anticipated by Langley et al., U.S. Patent No. 5,460,817. The Applicants submit that the particles of Langley are structurally and functionally distinguishable from those of the invention and that one would not immediately envisage the present invention from the Langley disclosure. Claim 1 of the present invention requires a shell polymer having at least one acid-hydrolyzable bond; Claim 8 requires a shell polymer having at least one base-hydrolyzable bond.

The polymeric shell of Langley is distinguishable from that of the present invention. First, unlike the present invention, the particles of Langley do not have a well-defined shell. The Langley particles comprise two distinct polymers: (1) a matrix polymer and (2) a polymer of the outer protective shell. The matrix polymer is located in the core of the particles and an active ingredient is distributed through the matrix polymer, see col. 3, lines 47-52. The matrix polymer does not form a well-defined shell around the core of the active ingredient as required by the present invention. Rather, the matrix polymer of Langley is intimately mixed with the active ingredient--see, for example, col. 13, lines 39-41, which indicates that crystallization of the active ingredient can be prevented and that a glass structure can be achieved by inclusion of sufficient matrix polymer in the core.

Moreover, unlike the present invention (where the microcapsules are obtainable by polymerizing a monomer mixture constituting the capsule shell in the oil phase of a stable oil-in-water emulsion), the polymeric shell of Langley is prepared by coacervation, in particular, by the so-called “low-critical solution temperature” (“LCST”) polymers, see col.

9, lines 11-14. Col. 10 indicates that the LCST polymer may contain, in addition to a LCST monomer, anionic monomers, such as acrylic acid, or cationic monomers, such as, dialkylaminoethyl (meth)acrylates and acrylamides. While the document indicates that a beneficial effect may result from the use of cationic or anionic comonomer or termonomer by preventing coagulation and subsequent phase separation of the encapsulated particles, see col. 10, lines 35-38, it does not indicate the amount in which the anionic or cationic monomers are present in the LCST polymer. However, where cationic or anionic monomers are used for stabilization (such as prevention of coagulation), typically such monomers are used in amounts well below 10% by weight, e.g., 1-3% by weight. However, these low amounts are insufficient to render the copolymer or terpolymer water soluble upon addition of base or acid, respectively. To further distinguish the invention from the particles of Langley, Claims 1 and 8 have been limited to “at least 10%” of the respective monomers.

As Langley does not disclose all the features of the present invention, nor disclose the amounts “at least 10%” by weight of the respective monomers with sufficient specificity to constitute anticipation, the Applicants submit that Langley does not anticipate the invention. Accordingly, they respectfully request that this rejection now be withdrawn.

Rejection—35 U.S.C. §102

Claims 1-11 were rejected under 35 U.S.C. 102(b) as being anticipated by Lykke et al., WO 97/24177. Lykke does not anticipate the invention because it discloses a polymer shell which has distinguishable structural and functional characteristics compared to the shell of the present invention.

Lykke discloses a polymer shell formed of a condensation polymer, see page 15, lines 6-7, instead of an addition polymer formed by polymerizing ethylenically unsaturated monomers as required by the invention. The condensation polymer may be a polyamide

which can be obtained by reaction of diamine with a dicarboxylic acid. The Applicants submit that it would be clear that the amino groups and the carboxylic acid groups are consumed during that reaction and that the resulting polymer cannot be protonized or deprotonized upon the addition of acid or base, respectively. While the Official Action refers to Lykke, page 14, line 22-page 15, line 5, this passage refers to the so-called core polymer (not shell polymer) of Lykke, see e.g., page 6, line 1 and page 14, line 7. Accordingly, in view of the structural and functional differences between the Lykke polymer compositions and those of the present invention, the Applicants respectfully request that this rejection now be withdrawn.

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Reply to Office Action of August 6, 2003.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

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